

**NOTE**

If the driven sprocket is worn or damaged and must be replaced, also inspect the drive chain and drive sprocket for damage. Never replace just one of these 3 components without a thorough inspection of all the rest. If one is replaced, the other 2 should also be replaced. If not, the new component will wear out prematurely.

11. Assemble by reversing these disassembly steps.

#### REAR AXLE AND DRIVEN SPROCKET (1975-1978 ATC90 AND 1979-1983 ATC110)

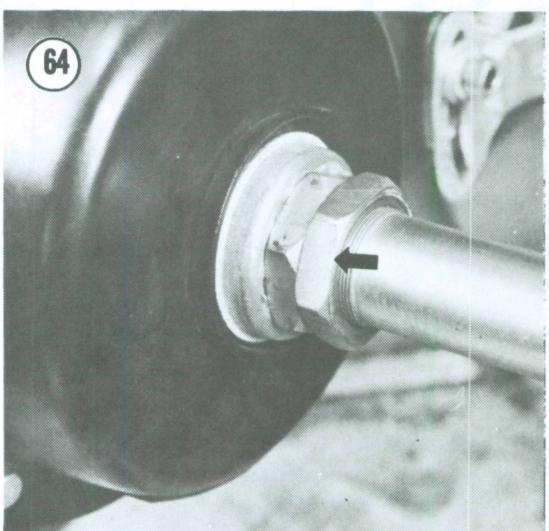
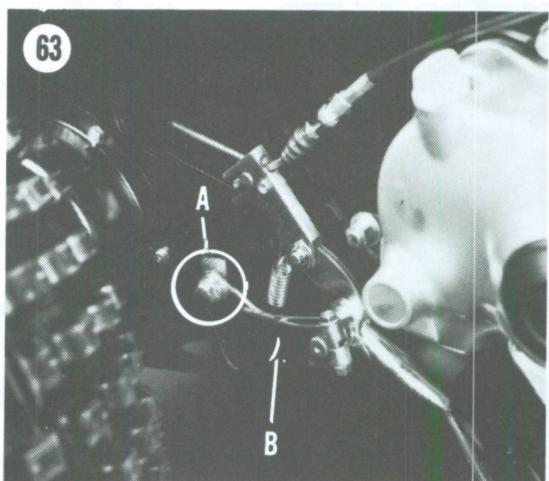
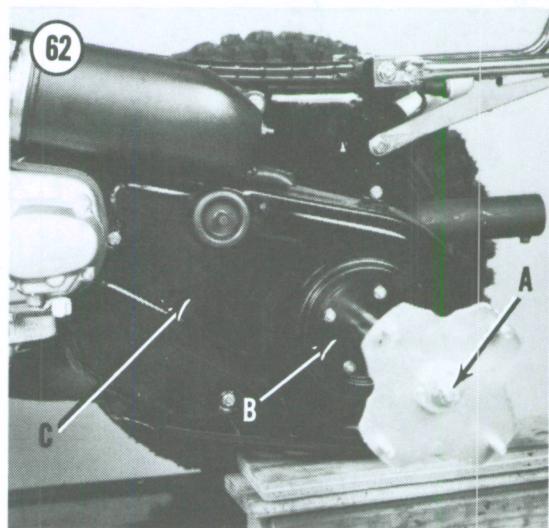
##### Removal/Installation

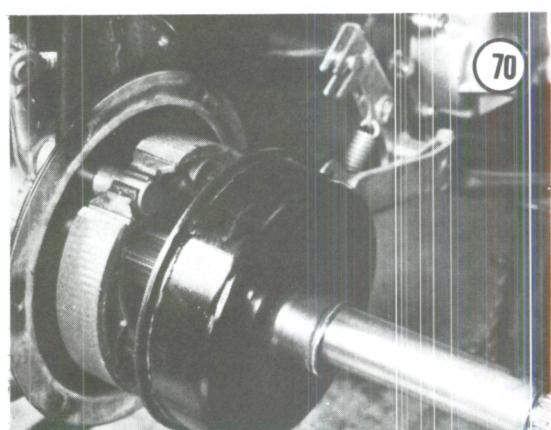
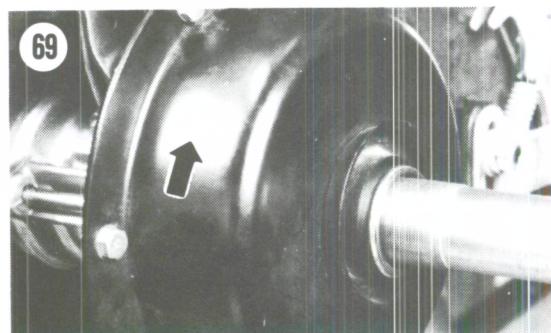
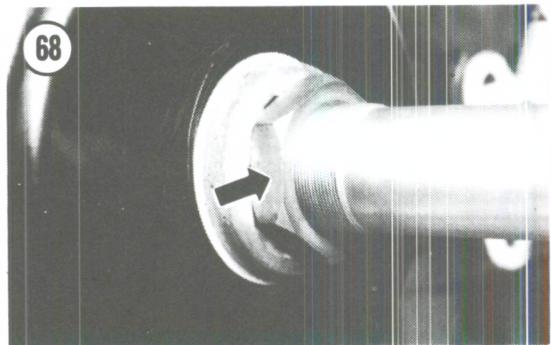
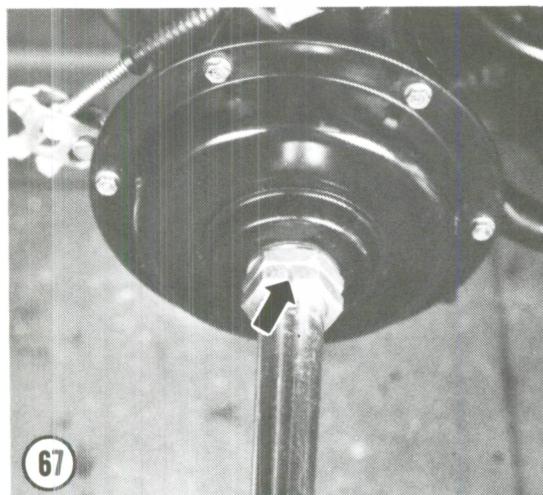
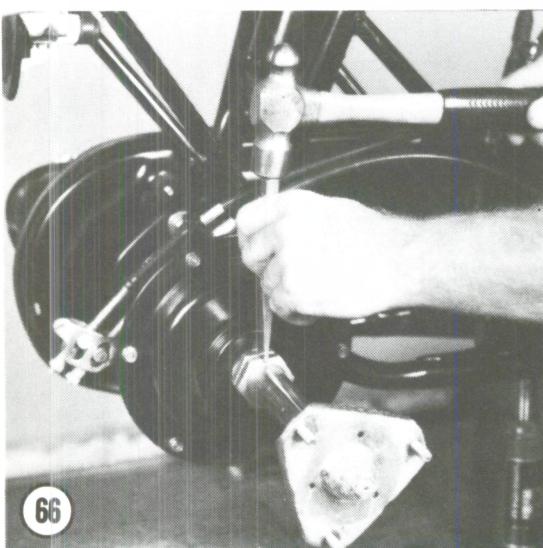
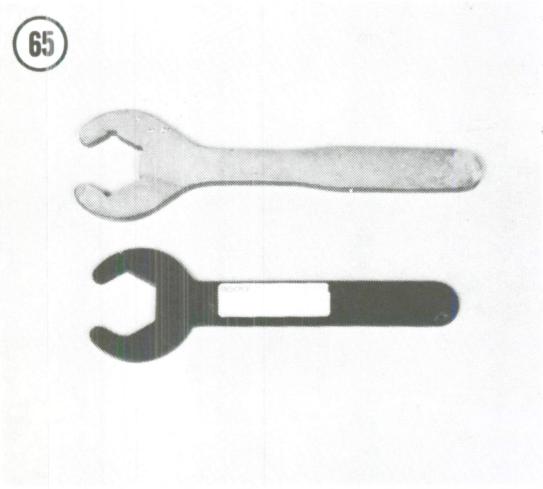
1. Place the ATC on level ground and set the parking brake.
2. Remove the seat/rear fender assembly.
3. Remove the bolts securing the skid plate and remove the skid plate.
4. Remove both rear wheels as described in this chapter.
5. To remove the hubs, perform the following:
  - a. Remove the cotter pin and castellated nut securing the rear hub.
  - b. Remove the lockwasher and the hub (A, Figure 62).
  - c. Remove both the left- and right-hand hubs.
  - d. Remove the spacer collar(s) from the axle.
6. On the left-hand side, remove the bolts securing the cover plate and slide off the cover plate (B, Figure 62).
7. On the left-hand side, remove the bolts securing the drive chain cover and slide off the cover (C, Figure 62).
8. On the right-hand side, perform the following:
  - a. Remove the chain tensioner locknut (A, Figure 63).
  - b. Remove the bolt and nut securing the drive chain tensioner arm (B, Figure 63).
  - c. Remove the tensioner arm.
9. Use a 41 mm wrench and remove the locknut (Figure 64) securing the brake drum.

**NOTE**

The special 41 mm flame cut wrench (Figure 65) is available from a motorcycle dealer, Rocky or other mail order houses.

10. If you are unable to loosen the locknut it will have to be chiseled off (Figure 66). Do not chisel all the way through into the threads on the axle (Figure 67).





**NOTE**  
The inner nut does not have Loctite applied to it and is easier to remove.

11. Remove the inner nut (Figure 68).
12. Slide off the small cover plate.
13. Remove the bolts securing the brake drum cover (Figure 69) and slide off the cover.
14. Release the parking brake.
15. Slide off the brake drum (Figure 70).
16. Loosen the rear axle bearing holder bolts. There are 2 on each side. Loosen the drive chain adjuster and push the rear axle assembly forward to allow slack in the drive chain.

17A. On models with a master link equipped drive chain, perform the following:

- Remove the master link (**Figure 71**) and remove the drive chain from the driven sprocket.
- Withdraw the rear axle from the bearing holder from the left-hand side.

**NOTE**

*On 1981-1983 ATC110 models, the original equipment drive chain can be broken with a chain breaker (**Figure 72**) and then replaced with an aftermarket drive chain with a master link. Do not add a master link to the continuous loop Honda drive chain.*

17B. On models with a continuous loop drive chain, perform the following:

- Remove the recoil starter assembly as described in Chapter Seven.
- Remove the alternator assembly as described in Chapter Seven.
- Remove the subtransmission as described in Chapter Five.
- Remove the left-hand crankcase cover as described in Chapter Four.
- Disconnect the rear brake cable from the brake pedal assembly and completely unscrew the brake pedal adjustment nut (**Figure 73**).
- Unhook the brake pedal return spring and remove the brake pedal.
- Withdraw the drive chain tensioner from the left-hand side.
- Withdraw the rear axle, drive chain and drive sprocket as an assembly from the left-hand side.

18. Install by reversing these steps, noting the following.

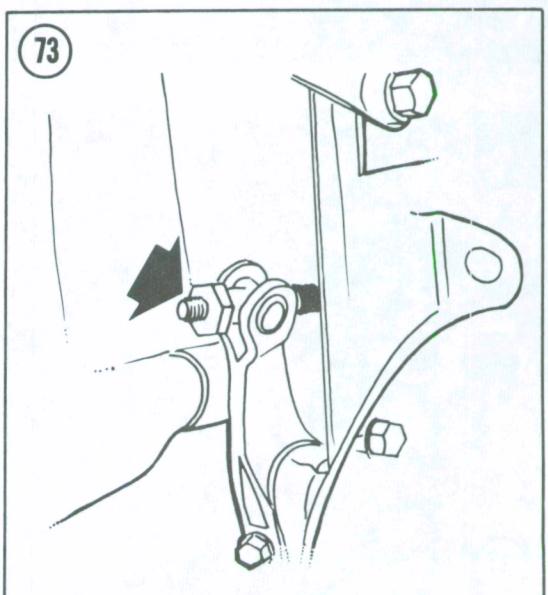
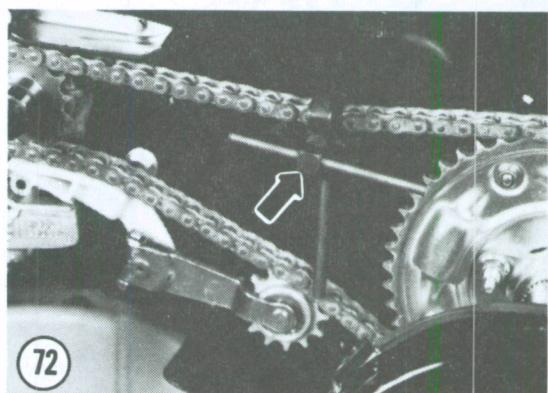
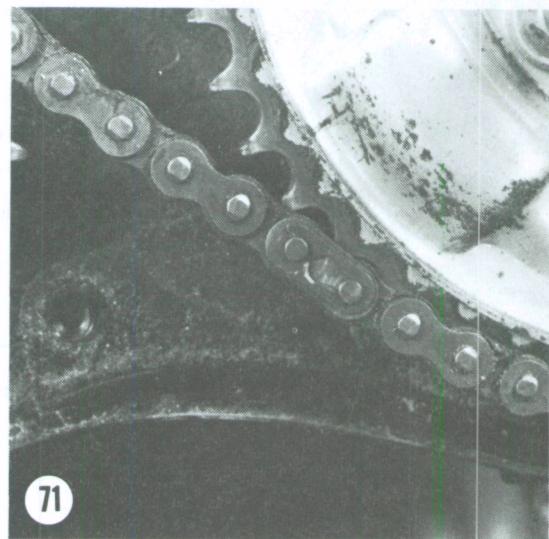
19. Install the brake drum and push it on all the way until it is completely seated.

20. Install the axle inner nut. Have an assistant hold the left-hand wheel while you tighten the inner nut enough to seat the brake drum.

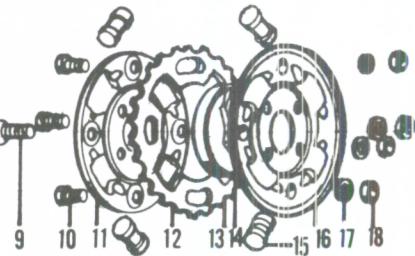
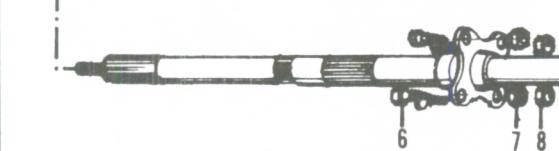
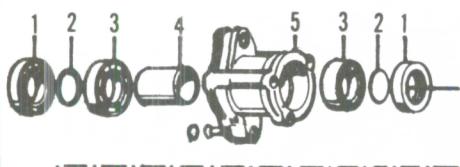
21. Apply the parking brake and completely tighten the inner nut to the torque specification listed in **Table 1**.

22. Thoroughly clean all grease from the axle threads prior to applying the Loctite in the next step.

23. Apply Loctite Lock N' Seal to the axle shaft threads and install the axle locknut. Hold onto the inner nut and tighten the locknut to the torque specification listed in **Table 1**.



**REAR AXLE AND DRIVEN SPROCKET**  
**(1975-1978 ATC90;**  
**1979-1983 ATC110)**

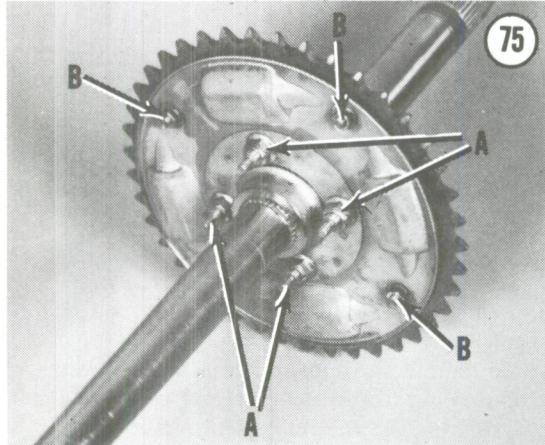


1. Oil seal  
 2. O-ring seal  
 3. Bearing  
 4. Distance collar  
 5. Wheel axle bearing holder  
 6. Bolt  
 7. Washer  
 8. Nut  
 9. Rear axle  
 10. Bolt

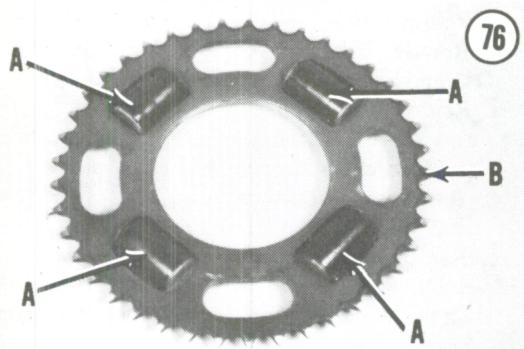
11. Damper holder  
 12. Driven sprocket  
 13. O-ring  
 14. O-ring holder (models so equipped)  
 15. Rubber damper  
 16. Damper holder  
 17. Washer  
 18. Nut

74

8



75



76

24. On models equipped with a drive chain master link, install the master link so that the closed end of the clip is facing in the direction of travel (Figure 45).

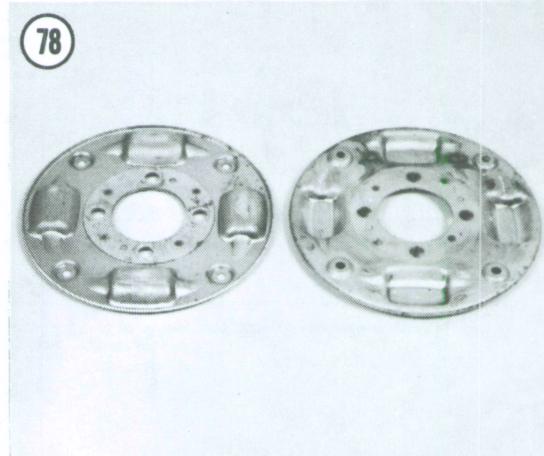
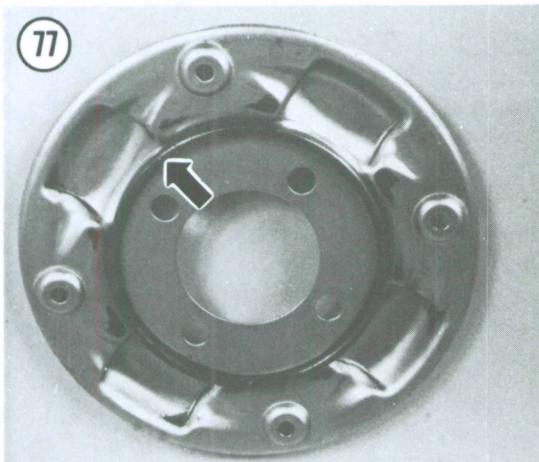
25. Adjust the drive chain as described in Chapter Three.

26. Adjust the rear brake as described in Chapter Three.

**Disassembly/Inspection**

Refer to Figure 74 for this procedure.

1. Remove the rear axle as described in this chapter.
2. Remove the nuts (A, Figure 75) securing the driven sprocket assembly to the axle.
3. Slide the driven sprocket assembly off the rear axle.
4. Remove the bolts (B, Figure 75) holding the driven sprocket assembly together and separate the assembly.
5. Inspect the rubber dampers (A, Figure 76) for signs of damage or deterioration. Replace all if any are damaged.
6. Replace all rubber dampers as a set even if only one shows signs of deterioration or damage.
7. Inspect the O-ring (Figure 77) for signs of deterioration. Replace if necessary.
8. Inspect both damper holders (Figure 78) for damage, especially in the area where the rubber



dampers ride. These areas should be free of burrs, dents and corrosion. Replace if necessary.

9. Inspect the driven sprocket (B, Figure 76). Compare to Figure 60. If it is worn or distorted, replace the sprocket.

*NOTE*

*If the driven sprocket is worn or damaged and must be replaced, also inspect the drive chain and drive sprocket for damage. Never replace just one of these 3 components without a thorough inspection of all the rest. If one is replaced, the other 2 should also be replaced. If not, the new component will wear out prematurely.*

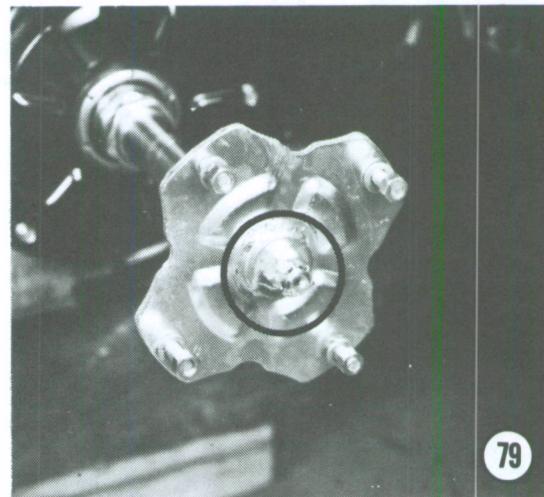
### Assembly

1. Apply a light coat of multipurpose grease to the pockets of the damper holder where the rubber dampers ride and to the center flange area.
2. Make sure the rubber dampers and O-ring seal are installed in one of the damper holders.
3. Place the driven sprocket onto this assembly and install the other damper holder.
4. Align the holes in the 2 damper holders, install the bolts (B, Figure 75) and tighten securely.
5. Slide the driven sprocket assembly onto the left-hand end of the rear axle.
6. Install the nuts (A, Figure 75) securing the driven sprocket assembly to the axle and tighten to the torque specification listed in Table 1.
7. Install the rear axle as described in this chapter.

### REAR AXLE AND DRIVEN SPROCKET (1984 ATC110 AND ATC125M)

#### Removal/Installation

1. Place the ATC on level ground and set the parking brake.



2. Remove the seat/rear fender assembly.
3. Remove both rear wheels as described in this chapter.
4. To remove the hubs, perform the following:
  - a. Remove the cotter pin and castellated nut securing the rear hub (Figure 79).
  - b. Remove the lockwasher and the hub (Figure 80).
  - c. Remove both the left- and right-hand hubs.
  - d. Remove the spacer collar(s) from the axle.
5. On the left-hand side, perform the following:
  - a. Remove the crankcase breather, carburetor and (on ATC125M) the battery overflow tubes (A, Figure 81) from the drive chain cover.
  - b. Remove the bolts securing the cover plate and slide off the cover plate (B, Figure 81).
  - c. Remove the bolts securing the drive chain cover and slide off the cover (C, Figure 81). There is one additional bolt at the rear (Figure 82).

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